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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,001	08/03/2001	Saed Younis	000412	8521
23696	7590	07/27/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			WANG, TED M	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,001

Applicant(s)

YOUNIS, SAED

Examiner

Ted M. Wang

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 17-19 been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Drane et al. (US 6,275,705).

- With regard claim 17, Drane et al. discloses a method for determining an amount of delay comprising:

determining locations of a reception antenna and the transmission antenna to determine an air time between the reception and transmission antennas (Fig. 1 elements 12 and 13, column 2 lines 14-58, column 5 lines 30-42, and column 7 line 5 – column 8 line 7);

determining a transmission time by calculating a time it takes for a signal transmitted from the base station through the transmission antenna to arrive at

the reception antenna (Fig.1 elements 12 and 13, column 2 lines 14-58, column 5 lines 30-42, and column 7 line 5 – column 8 line 7); and
determining the amount of delay between the base station and the transmission antenna by subtracting the air time from the transmission time (Fig.1 elements 12 and 13, column 2 lines 14-58, column 5 lines 30-42, and column 7 line 5 – column 8 line 7). It is inherent that with two known fixed positions (base station and reference mobile station), the propagation time can be easily calculated.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drane et al. (US 6,275,705) in view of Ymawaki (US 5,875,402).

- With regard claim 18, Drane et al. discloses all of the subject matter as described in the above paragraph except for specifically teaching wherein the location of the reception antenna is determined by using a GPS position location system. However, Ymawaki teaches that wherein the location of the reception antenna is determined by using a GPS position location system (Fig.1 and 3 elements 100-

114, column 9 line 35 – column 10 line 53, and column 7 line 15 – column 8 line 26).

It is desirable that the location of the reception antenna is determined by using a GPS position location system in order to improve the distance measurement and time synchronization accuracy (column 9 lines 47-61). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the apparatus/method as taught by Ymawaki in which wherein the location of the reception antenna is determined by using a GPS position location system, into Dranes' location and tracking system so as to improve the distance measurement and time synchronization accuracy.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drane et al. (US 6,275,705) in view of Kotzin et al. (US 6,173,005).

- With regard claim 19, Drane et al. discloses all of the subject matter as described in the above paragraph except for specifically teaching offsetting a relative timing of the signal transmitted from the base station with respect to a reference signal at a point of generation of the signal transmitted from the base station to determine a timing at the transmission antenna of the signal transmitted from the base station with respect to the reference signal.

However, Kotzin et al. teaches that offsetting a relative timing (Fig.3 element 320 and column 6 lines 41-58) of the signal transmitted from the base station with respect to a reference signal (Fig.3 element 218) at a point of generation of the signal transmitted from the base station to determine a timing at the transmission

antenna (Fig.3 element 222) of the signal transmitted from the base station with respect to the reference signal (Fig.3 element 320 and column 6 lines 41-58). It is desirable to offset a relative timing of the signal transmitted from the base station with respect to a reference signal at a point of generation of the signal transmitted from the base station to determine a timing at the transmission antenna of the signal transmitted from the base station with respect to the reference signal in order to improve the diversity at the receiver (column 6 lines 49-58). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the apparatus/method as taught by Kotzin et al. in which offsetting a relative timing of the signal transmitted from the base station with respect to a reference signal at a point of generation of the signal transmitted from the base station to determine a timing at the transmission antenna of the signal transmitted from the base station with respect to the reference signal, into Dranes' locating and tracking system so as to improve the diversity at the receiver.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
8. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M Wang
Examiner
Art Unit 2634

Ted M. Wang



SHUWANG LIU
PRIMARY EXAMINER